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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,923	01/03/2005	Norbert Kroth	1454-1588	7678

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EXAMINER

EWART, JAMES D

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/519,923	Applicant(s) KROTH ET AL.	
	Examiner James D. Ewart	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed June 28, 2006, have been fully considered by Examiner, but they are not deemed persuasive.
2. Regarding the argument that Oom et al. does not teach that the Radio Base Station (RBS) directly administers physical resources, the Examiner disagrees. Base stations are in direct communication with the mobile devices connected to them and provide the resources for communication. Oom et al states in Column 1, Lines 32-35 that "The RBSs usually include one or more antennas or antenna arrays along with sufficient electronics (e.g., transceivers, control units, etc.) to service mobile stations (MSes) within their respective cell or cells". In addition, since the RNC must provide resources for the mobile station as shown in figure 2, the RNC directly administers resources for the communication link for the mobile station and could also be considered the first device for directly administering physical resources for data transmission to user equipment.
3. Regarding the argument that load information is not sent from the RBS to the RNC, the claim only indicates a first hierarchy and a second hierarchy. In addition, Oom et al. teaches providing load measurement reports to a radio network manager and states in Column 9, Line 66 that: "measurement reports (505) are sent from the MS 120 to the MCS of the RNC1" however as shown in figure 2, the actual connection is from the MS to the ***RBS to the RNC***. On the other hand, with the RNC as the first device, the RNC sends the report to the second device the RNM and Oom et al. states in Column 7, Lines 46-48 that: "In the exemplary sequence diagram 400,

Application/Control Number: 10/519,923

Art Unit: 2617

the OMAs of the RNC1, the RNC2, and the RNC3 send CPU load measuring reports (405) to a network performance management application in the RNM” thus providing load information at one hierarchy to another device at a second hierarchy higher than the first hierarchy.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 14-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Oom et al. (U.S. Patent No. 6,738,625).

Referring to claim 14, Oom et al teaches a method for controlling transmission of data in a radio communication system having a hierarchical network architecture (Figure 2 and Column 1, Lines 32-35), comprising: directly administering physical resources for a data transmission to user equipment by a first device at a first hierarchy within the hierarchical network architecture in (Column 1, Lines 32-35); and transmitting load information about a current load situation of the physical resources by the first device to a second device at a second hierarchy higher than the first hierarchy within the hierarchical network architecture for controlling a load distribution (Column 11, Lines 1-5 and Column 10, Lines 64-67).

Application/Control Number: 10/519,923

Art Unit: 2617

Referring to claim 15, Oom et al further teaches wherein the load information includes load states for an area of the radio communication system supplied by the first device (Column 7, Lines 49-54 and Column 8, Lines 4-11).

Referring to claim 16, Oom et al further teaches wherein the load information includes load values averaged over time for at least one of defined operating parameters and signaling types of the radio communication system for radio data connections between user equipment and a third device of a lowest hierarchy (Column 7, Lines 49-60).

Referring to claim 17, Oom et al further teaches cell load reporting; and checking on an assignment of user equipment to specific devices of the lowest hierarchy based on said cell load reporting (Column 1, Lines 31-37, Column 7, Lines 65-67 and Column 8, Lines 1-5).

Referring to claim 18, Oom et al further teaches wherein the radio communication system is a cellular radio communication system (Column 1, Lines 54-59), and wherein said method further comprises checking on a handover option for at least one user equipment from a first cell of the radio communication system to a second cell of the radio communication system based on said cell load reporting (Column 10, Lines 64-67 and Column 8, Lines 4-11).

Referring to claim 19, Oom et al further teaches wherein said cell load reporting includes transmissions depending on particular time events (Column 7, Lines 49-60).

Application/Control Number: 10/519,923

Art Unit: 2617

Referring to claim 20, Oom et al further teaches wherein said cell load reporting includes periodic transmissions (Column 7, Lines 49-60).

Referring to claim 21, Oom et al further teaches wherein said cell load reporting includes transmissions depending on specific operational events of the radio communication system (Column 7, Lines 49-60).

Referring to claim 22, Oom et al further teaches wherein said cell load reporting is undertaken as a function of defined load states for the area of the radio communication system served by the first device (Column 1, Lines 31-37, Column 7, Lines 65-67, Column 8, Lines 1-5 and Column 10, Lines 64-67).

Referring to claim 23, Oom et al further teaches wherein said cell load reporting is undertaken as a function of defined threshold values for the load states (Column 10, Lines 64-67 and Column 11, Lines 1-15).

Referring to claim 25, Oom et al teaches a radio communication system having a hierarchical network architecture with devices for control of transmission of data to user equipment and administration of physical resources (Figure 2 and Column 1, Lines 32-35), comprising: at least one high level device at a first hierarchy within the hierarchical network architecture, controlling load distribution of the radio communication system (Column 11, Lines 1-5 and Column 10, Lines 64-67); and at least one low level device at a second hierarchy lower

Application/Control Number: 10/519,923

Art Unit: 2617

than the first hierarchy, transmitting to said high level device, information about a current load situation of the physical resources directly administered by said at least one low level device for a data transmission to the user equipment (Column 1, Lines 32-35), said high level device controlling the load distribution based on the information (Column 11, Lines 1-5 and Column 10, Lines 64-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oom et al and further in view of Jain et al. (U.S. Patent Publication No. 20020193118)

Referring to claims 24 and 26, Oom et al teaches the limitations of claim 24 and 26, but does not teach controlling a transmission of data packets in a packet data transmission system. Jain teaches controlling a transmission of data packets in a packet data transmission system (0021 and 0032). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Oom et al with the teaching of Jain of controlling a transmission of data packets in a packet data transmission system to understand that the principles of invention could be applicable to other wireless communication systems.

Application/Control Number: 10/519,923

Art Unit: 2617

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Ewart whose telephone number is (571) 272-7864. The examiner can normally be reached on M-F 7am - 4pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571)272-7872. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2600.

James D. Ewart
Ewart

October 6, 2006

William Trost
WILLIAM TROST
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